

Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims of this application:

Listing of Claims:

1-6. (Canceled).

7. (Previously presented) A Magnetic Random Access Memory (MRAM) device comprising:

an array of magnetic memory cells arranged in intersecting rows and columns;

a plurality of magnetic memory cell selection devices, each of which is coupled to a respective one of the magnetic memory cells in the array to enable selective access to any of the magnetic memory cells during a write operation, wherein a number of the rows included in the array is limited according to the relation:

$$\eta = \sqrt{\frac{R_m * \varepsilon (2 + K_{DR})}{R_r (1 - \varepsilon)}}$$

where R_m comprises a resistance of one of the magnetic memory cells, ε comprises a maximum current non-uniformity of the array during a write operation, K_{DR} depends on a reverse bias resistance of one of the magnetic memory cell selection devices, and R_r comprises a resistance of a row or column of the magnetic memory cells.

8. (Previously presented) The MRAM according to Claim 7 wherein the maximum current non-uniformity of the array comprises less than about 15 percent.

9. (Canceled).

10. (Previously presented) The MRAM according to Claim 7 wherein the magnetic memory cell selection devices comprises diodes or transistors.

11. (Canceled).

12. (Currently amended) A method of sizing a MRAM comprising:
determining a maximum current non-uniformity for the MRAM array to be provided by the array during a write operation wherein a number of rows for inclusion in the array is limited according to the relation:

$$\eta = \sqrt{\frac{R_m * \varepsilon (2 + K_{DR})}{R_r (1 - \varepsilon)}}$$

where R_m comprises a cell resistance of one of magnetic memory cells, ε comprises a maximum current non-uniformity of the array during a write operation, K_{DR} depends on the reverse bias resistance of a magnetic memory cell selection device, and R_r comprises a resistance of a row or column of the magnetic memory cells.

13. (Previously presented) The method according to Claim 12 wherein the maximum current non-uniformity of the array comprises less than about 15 percent.

14. (Canceled).

15. (Previously presented) The method according to Claim 12 wherein the magnetic memory cell selection devices comprises diodes or transistors.

16. (Canceled).